DOCUMENT RESUME

ED 036 166 | 24 | EM 007 752

| | |
|---|---|
| AUTHOR | LINDVALL, C. M. |
| TITLE | CRITERIA FOR STATING IPI OBJECTIVES. |
| INSTITUTION | RESEARCH FOR BETTER SCHOOLS, INC., PHILADELPHIA, PA. |
| SPONS AGENCY | OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH. |
| BUREAU NO | BR-6-2867 |
| PUB DATE | 15 JUL 68 |
| CONTRACT | OEC-1-7-062867-3053 |
| NOTE | 5P. |
| EDRS PRICE | EDRS PRICE MF-$0.25 HC-$0.35 |
| DESCRIPTORS | *BEHAVIORAL OBJECTIVES, *EVALUATION CRITERIA, *INDIVIDUALIZED INSTRUCTION, PERFORMANCE CRITERIA, STUDENT BEHAVIOR, TASK PERFORMANCE |
| IDENTIFIERS | INDIVIDUALLY PRESCRIBED INSTRUCTION, IPI |

ABSTRACT

CRITERIA TO BE USED IN EVALUATING THE QUALITY OF THE FORM IN WHICH INDIVIDUALLY PRESCRIBED INSTRUCTION (IPI) OBJECTIVES ARE STATED INCLUDE WRITING THE OBJECTIVE IN TERMS OF OBSERVABLE PUPIL BEHAVIOR, STATING THE PERFORMANCE IN TERMS OF AN "ACTION VERB", SPECIFYING THE OBJECT OF THE ACTION VERB, STATING THE CONTEXT OR CONDITIONS FOR DISPLAYING THE DESIRED PUPIL BEHAVIOR, AND ACCOMPANYING THE OBJECTIVE WITH AN EXAMPLE OF ACHIEVEMENT EVALUATION. (SP)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

C. M. Lindvall
July 15, 1968

ED036166

# Criteria for Stating IPI Objectives

The criteria set forth in this paper are to be used in evaluating the quality of the form in which IPI objectives are stated. To this extent, they are intended to serve a very limited, but a very important, purpose. It is assumed that adherence to these criteria will maximize the chances that any given objective will have the same exact meaning to lesson writers, materials developers, test constructors, teachers, students, and other interested persons. Persons developing objectives should take all of these criteria into account in wording each objective and in editing their work. In some instances one or two of the criteria may logically be ignored. For example, with some objectives the setting or context may be so obvious that it would be unnecessary to state it. However, if a criterion is not adhered to, the writer must be in a strong position for defending this step. In most cases, all criteria are of essential importance.

1. The objective should be written in terms of observable pupil behavior. It should not be a description of what the teacher does to bring about the desired behavior, nor should it dictate the manner in which the teaching materials are constructed. All statements of the desired performance should be prefaced by, "The pupil will be able to . . . ."

The performance specified by the objective should be stated in terms of what the pupil will be able to do after he has had the required learning experiences. Objectives should state the terminal behavior to be accomplished, not specific tasks that lead to the desired behavior.

EM007 752

2. The performance should be stated in terms of an "action verb" (and any necessary qualifiers) which specifies an observable behavior. Although words such as circle, underline, put an X on, etc. refer to specific observable behavior, and may be used in certain instances, there are times when such words are too limiting. Words such as select, choose, pick out, etc., are more appropriate since the pupil can circle, underline, put an X on, when these broader terms are used. The goal here must be to use an action verb that is specific enough so that different persons can agree as to what does or does not constitute acceptable test performance. However, it should not be so specific that it prescribes only one example of a test performance. The attached examples of acceptable and unacceptable verbs may be useful in clarifying this distinction.

3. The object of the action verb (or the thing acted upon) must be so specific that a number of persons can all agree as to what it is. Whereas the action verb prescribes the pupil behavior, the object of the action verb describes the content or step in the curriculum that the pupil operates on. A pupil may be required to order, sort, select, summarize, list, construct, etc., but this particular part of the objective specifies the object or content to which the action is to be applied.

EXAMPLE

| Verb | Object |
|---|---|
| Order | three objects by weight |
| Identify | synonyms for specified words |
| Select | correct pictured representation of solids: sphere, cone, cylinder, rectangle, and cube |

4. An objective should also state the context or conditions under which the desired pupil behavior is expected to be displayed. Frequently this part of the objective is prefaced by such words or phrases as "given," "when given," "after reading," "when," "when presented with," etc. The action verb describes pupil behavior, the object, or content limits his field of performance, and the context describes the situation in which the pupil is required to perform.

There are instances when this segment of the objective may precede the action verb or when this part may be understood.

EXAMPLE

Given. . .the pupil will be able to. . . .

EXAMPLE

Count orally from 1 to 10. (Understood: When asked to do so by the teacher.)

EXAMPLE

| Verb | Object | Context |
|---|---|---|
| Order | three objects by weight | by using an equal arm balance. |
| Identify | synonyms for specified words | when presented with these words in a sentence. |
| Select | correct pictured representation of solids: sphere, cone, cylinder, rectangle, and cube | when name of solid is given. |

5. Each objective should be accompanied by a description of an example of a way in which its achievement might be evaluated. This may be a sample test item, a description of a situation in which the pupil would be observed, a specification of a product that would be examined, etc.

July 18, 1968

The persons involved in writing behavioral objectives must determine the appropriate verb to be used in the objective. One question that may be asked is "What must the student do to show that he has mastered this particular step in the curriculum?" Must he measure something, must he stand on his head, must he label a diagram, must he divide words into syllables, etc., etc? Whatever the student must do should be stated in precise language.

Anytime the following verbs are used alone, we can assume that the students response is to be made through the use of the paper and pencil method. If we assume this, then excess words such as: in written form, by the appropriate method, etc. can be avoided. Anytime a response other than written is required or necessary, that particular mode should be stated in the objective. i.e. State orally, construct using blocks, etc.

The following verbs have been taken from the curricula of the three IPI areas. The list is by no means complete, nor binding. Again, the decision of what a student must 'do' to show that he has mastery of a terminal behavior in a curriculum rests with the curriculum designers.

Acceptable verbs (for certain situations)

| | | |
|---|---|---|
| count | order - arrange | complete - fill in - supply |
| select | sort - classify | rephrase |
| choose | label | state |
| pick out | measure | name |
| identify (?) | weigh | explain (?) |
| add - total | draw | describe (?) |
| subtract - take away | construct - make(?) | match |
| multiply | list | convert |

Acceptable verbs (cont'd)

| | | |
|---|---|---|
| divide | rename | regroup |
| delete | alphabetize | |

---

Verbs that do not appear to be specific (too broad)

| | | |
|---|---|---|
| respond | generate | observe |
| does | deduce | test |
| perform | infer | apply |
| use | examine | interpret |

---

Verbs that are methods of recording answers (too specific)

| | | |
|---|---|---|
| check | put an X on | write the number of |
| circle | draw a ring around | write the letter of |
| underline | put a mark on | draw a line between |
| shade | color the same as.... | put a box around |

---

Toss-up verbs (probably need to be further defined in the objective)

| | | |
|---|---|---|
| demonstrate | collect and synthesize | contrast |
| discriminate | determine | predict |
| differentiate | answer | locate |
| distinguish | compare | give |

---